Listing of Claims:

Claims 1-25 and 46-52 are canceled without prejudice or disclaimer. New claims 53-71 are added. Please note that all claims currently pending and under consideration in the referenced application are shown below.

1 – 25 (Canceled)

26. (Withdrawn) A helper phage comprising a nucleic acid encoding phage proteins or functional equivalents of said phage proteins that are essential for the assembly of said helper phage, said nucleic acid encoding phage proteins further encoding a mutant form of a phage coat protein wherein said mutant form is characterized in that a phage comprising no wild type phage coat protein from which said mutant form is derived and having a coat comprising said mutant form and no copies of a functional form of said phage coat protein is less infectious than a phage comprising no wild type phage coat protein from which said mutant form is derived and having a coat comprising at least one copy of said functional form wherein said functional form is characterized in that it renders a phage particle carrying said functional form in its coat infectious and wherein said helper phage does not comprise a nucleic acid encoding said functional form.

27. (Withdrawn) The helper phage according to claim 26 wherein said phage coat protein is the g3 protein.

28. (Withdrawn) The helper phage according to claim 27 wherein said mutant form comprises a mutation in the D1 and/or the D2 region of said g3 protein.

29. (Withdrawn) The helper phage according to claim 28 wherein said mutation comprises a deletion of substantially all of said D1 and said D2 region of said g3 protein.

30. (Withdrawn) The helper phage according to claim 26 wherein said mutant form is further characterized in that a phage having a coat comprising said mutant form in the presence or absence of a copy of said functional forms is stable.

31. (Withdrawn) A method for producing a helper phage comprising the steps of:

providing a host cell with a first nucleic acid encoding a functional form of a phage coat protein,

providing said host cell with a second nucleic acid encoding a mutant form of said phage coat protein wherein said mutant form is characterized in that a phage comprising no wild type phage coat protein from which said mutant form is derived and having a coat comprising said mutant form and no copies of said functional form is less infectious than a phage comprising no wild type phage coat protein from which said mutant form is derived and having a coat comprising at least one copy of said functional form wherein said host cell comprises an additional nucleic acid sequence encoding at least all other proteins or functional equivalents thereof that are essential for the assembly of said helper phage in said host cell, and

culturing said host cell to allow assembly of said helper phage.

32. (Withdrawn) The method according to claim 31 wherein said other proteins or functional equivalents thereof that are essential for the assembly of said helper phage in said host cell are encoded by said second nucleic acid.

33. (Withdrawn) The method according to claim 31 wherein expression of said functional form and/or said mutant form is regulatable by altering the culturing conditions of said host cell.

34. (Withdrawn) The method according to claim 31 wherein expression of said functional form and/or said mutant form is under the control of a regulatable promoter.

35. (Withdrawn) The method according to claim 34 wherein said regulatable promoter comprises an AraC/BAD promoter or a functional equivalent of said AraC/BAD promoter.

36. (Withdrawn) The method according to claim 31 wherein said phage coat protein is the g3 protein.

37. (Withdrawn) The method according to claim 36 wherein said mutant form comprises a mutation in the Dl and/or the D2 region of said g3 protein.

38. (Withdrawn) The method according to claim 37 wherein said mutation comprises a deletion of substantially all of said Dl and said D2 region of said g3 protein.

39. (Withdrawn) The method according to claim 31 wherein said first nucleic acid and said second nucleic acid each comprise a unique selection marker.

40. (Withdrawn) The method according to claim 31 wherein said first nucleic acid and said second nucleic acid each comprise a unique origin of replication.

41. (Withdrawn) The method according to claim 31 wherein said first nucleic acid and said second nucleic acid comprise codons that essentially do not permit a homologous recombination event between said first nucleic acid and said second nucleic acid.

42. (Withdrawn) The method according to claim 33 wherein said helper phage comprises a nucleic acid encoding phage proteins or functional equivalents of said phage proteins that are essential for the assembly of said helper phage, said nucleic acid encoding phage proteins further encoding a mutant form of a phage coat protein wherein said mutant form is characterized in that a phage comprising no wild type phage coat protein from which said mutant form is derived and having a coat comprising said mutant form and no copies of a functional form of said phage coat protein is less infectious than a phage comprising no wild type phage coat protein from which said mutant form is derived and having a coat comprising at least one copy of said functional form wherein said functional form is characterized in that it renders a phage particle carrying said functional form in its coat infectious and wherein said helper phage does not comprise a nucleic acid encoding said functional form.

43. (Withdrawn) A method for the enrichment of a first binding pair member in a repertoire of first binding pair members selected from the group consisting of an antibody, an antibody fragment, a single chain Fv fragment, a Fab fragment, a variable region, a CDR region, an immunoglobulin or a functional part of said antibody, said antibody fragment, said single chain Fv fragment, said Fab fragment, said variable region, said CDR region, or said immunoglobulin, said first binding pair member being specific for a second binding pair member, said method comprising the steps of:

contacting the phage collection according to claim 13 with material comprising said second binding pair member under conditions allowing specific binding,

removing non-specific binders, and

recovering specific binders, said specific binders comprising said first binding pair member.

44. (Withdrawn) The method according to claim 43 comprising the additional steps of:

recovering from a phage a DNA sequence encoding said first specific binding pair member,

subcloning said DNA sequence in a suitable expression vector,

expressing said DNA sequence in a suitable host, and

culturing said suitable host under conditions whereby said first specific binding pair member is produced.

45. (Withdrawn) A nucleic acid molecule comprising a sequence encoding a mutant form of a phage coat protein, said mutant form being characterized in that a phage comprising no wild type phage coat protein from which said mutant form is derived and having a coat comprising said mutant form and no functional form of said phage coat protein is less infectious than a phage comprising no wild type phage coat protein from which said mutant form is derived and having a coat comprising said mutant form and at least one copy of said functional form of said phage coat protein wherein said functional form is characterized in that it renders a phage carrying said functional form in its coat infectious.

46-52 (canceled)

53. (New) A method of producing a chimaeric filamentous phage particle, the method comprising the steps of:

a) providing a host cell with a first nucleic acid encoding a fusion protein, wherein the fusion protein comprises a proteinaceous molecule fused to a wild type filamentous phage coat protein or a part, derivative or analogue thereof rendering a phage particle to which it is attached infectious;

b) providing the host cell with a second nucleic acid encoding a mutant form of the filamentous phage coat protein and further encoding all other proteins that are essential for the assembly of a filamentous phage particle in the host cell; and

c) culturing the host cell to allow assembly of the chimaeric filamentous phage particle wherein the fusion protein is attached to the chimaeric filamentous phage particle via the filamentous phage coat protein or a part, derivative or analogue thereof.

54. (New) The method of claim 53, wherein the second nucleic acid is provided by a helper phage to the host cell.

55. (New) The method of claim 53, wherein the filamentous phage coat protein is the g3 protein.

56. (New) The method of claim 55, wherein the mutant form of the filamentous phage coat protein comprises a mutation in the D1 region, D2 region, or in both regions of the g3 protein.

57. (New) The method of claim 56, wherein the D1 region and D2 region of the g3 protein are deleted.

58. (New) The method of claim 53, wherein the expression of the fusion protein, the mutant form of the filamentous phage coat protein, or both is regulatable by altering the culturing conditions of the host cell.

59. (New) The method of claim 53, wherein the expression of the fusion protein, the mutant form of the filamentous phage coat protein, or both is under control of a regulatable promoter.

60. (New) The method of claim 59, wherein the regulatable promoter comprises the AraC/BAD promoter, or a functional equivalent thereof.

61. (New) The method of claim 53, wherein the first nucleic acid and the second nucleic acid each comprise a unique selection marker.

62. (New) The method of claim 53, wherein the first nucleic acid and the second nucleic acid each comprise a unique origin of replication.

63. (New) The method of claim 53, wherein the first nucleic acid and the second nucleic acid comprise codons that do not lead to homologous recombination between the first nucleic acid and the second nucleic acid.

64. (New) The method of claim 53, wherein the chimaeric filamentous phage particle displays a mixture of proteins on its surface, the mixture comprising a fusion protein comprising a proteinaceous molecule fused to a wild type filamentous phage coat protein or part, derivative or analogue thereof rendering a filamentous phage particle to which it is attached infectious, the mixture further comprising a mutant form of the filamentous phage coat protein.

65. (New) The method of claim 53, wherein the proteinaceous molecules comprises a binding molecule.

66. (New) The method of claim 65, wherein the binding molecule is an antibody, a Fab fragment, a single chain Fv fragment, a variable region, a CDR region, an immunoglobulin or a functional part thereof.

67. (New) The method of claim 53, wherein the chimaeric filamentous phage particle is infectious.

68. (New) The method of claim 53, wherein the chimaeric filamentous phage particle comprises the first nucleic acid.

69. (New) The method of claim 53, wherein the chimaeric filamentous phage particle lacks the second nucleic acid.

70. (New) The method of claim 53, wherein the chimaeric filamentous phage particle is derived from a M13, M13K07, VCSM13 or a R408 strain.

71. (New) A method of producing a chimaeric filamentous phage particle, the method comprising the steps of:

a) providing a host cell with a first nucleic acid encoding a fusion protein, wherein the fusion protein comprises a proteinaceous molecule fused to a wild type filamentous phage coat protein or a part, derivative or analogue thereof rendering a filamentous phage particle to which it is attached infectious;
b) providing the host cell with a second nucleic acid encoding a mutant form of the filamentous phage coat protein, said host cell further comprising a nucleic acid encoding all other proteins that are essential for the assembly of a filamentous phage particle in the host cell; and
c) culturing the host cell to allow assembly of the chimaeric filamentous phage particle wherein the fusion protein is attached to the chimaeric filamentous phage particle via the filamentous phage coat protein or a part, derivative or analogue thereof.